

### Amendments to the specification

Please add the following new paragraph after line 18 on page 6 (i.e., just before paragraph [0014] of the published document 2007/0134442):

#### DISCLOSURE OF THE INVENTION

Please delete the paragraph beginning and ending on line 4 on page 4 of the specification (i.e., delete on line 4 of page 4 "DISCLOSURE OF THE INVENTION").

Please replace the third full paragraph on page 39 with the following amended paragraph:

As thermotropic type nematic liquid crystal used in the present invention, E-8 liquid crystal, ZLI-1565, ZLI-2140, ZLI-2582, ZLI-2788, ZLI-3462-000, ZLI-1844, MLC-9000-000/100, MLC-9100-000/100 (all produced from Merck Co., Ltd.), LIXON5005, LIXON5011, LIXON5013, LIXON5016, LIXON6520, LIXON9160, LIXON9839 (all produced from Chisso Corp.) are suitably used, however, other types may also be used. Biphenyl-based thermotropic type nematic liquid crystal, for example, E-8 liquid crystal above is one of the preferable ones.

Please replace the paragraph bridging pages 40-41 with the following amended paragraph:

Into 98 parts of NMP, 2 parts of a purified product of poly {imino-5-[4'-(4''-dimethylaminophenylazo)phenoxy-undecanoyloxy]isophthanoylimino-1,4-(3,5-diethyl)-phenylenemethylene-1,4-(3,5-diethylphenylene)} (a polyamide compound) was dissolved to prepare a 2% polymer solution. Then, spin coating is carried out so that a dry film thickness of from 0.6 to 0.7  $\mu\text{m}$  can be obtained on a glass substrate, and it was subjected to drying by heating at 180°C for 10 minutes to form said polyamide thin film. At the peripheral of the resultant 2 glass substrates, an epoxy resin mixed with spherical silica spacers having a diameter of about 7  $\mu\text{m}$  was coated, except for a charging port for liquid crystal, and the glass substrates were pasted so that the inner sides of photo-orientation films are opposing. Whole film surface of the glass substrate formed with said polyamide thin film, was irradiated by linear polarized light, obtained by passing visible light from a high pressure mercury lamp (500 W/hr) and produced by using a cut-off filter at 400 nm, through a polarizing plate, for 1 minute from a distance of 50 cm from said polyamide thin film, to unidirectionally orient a molecular

axis of photoactive groups. Then, the whole surface of the glass substrate was covered with a photo mask having stripes in about 70  $\mu\text{m}$  interval, so that the stripe direction is in parallel to electric vector of linear polarized light used in the first irradiation, and over which linear polarized light rotated by 45 degree from the first linear polarized light was irradiated to prepare a vacant liquid crystal cell. Fig. 1 schematically shows partially oriented state of photoactive groups induced by irradiation of linear polarized light, wherein reference numeral 1 represents micropattern alignment of axes of the photoactive groups of the polymer.

Please replace the paragraph bridging pages 41-42 with the following amended paragraph:

After light irradiation, thermotropic-type nematic liquid crystal E-8 liquid crystal (product name: produced from Merck Co., Ltd.) was charged into the space of the vacant liquid crystal cell (the space of two glass substrates), and the peripheral of the liquid crystal cell was completely sealed with an epoxy resin to obtain a retardation element of the present invention. This element was observed with a polarized light microscope and

confirmed orientation controlled state of E-8 liquid crystal. Fig. 2 shows the photo image with the polarized light microscope, wherein reference numeral 2 represents the white field of view in a polarized light microscope, and the white field of view means that the face of the linear polarized light was changed by passing through the region of the birefringence layer corresponding to the region of diagonal lines in the horizontal pattern having stripes of FIG. 1. Reference numeral 3 in FIG. 2 represents the black field of view in a polarized light microscope, and the black field of view means that the face of linear polarized light was not changed by passing through the region of the birefringence layer corresponding to the region of vertical lines of FIG. 1.

Please amend the first paragraph after "Example 2" on page 42 to read as follows:

Similarly as in Example 1, except that direction of a photo mask having stripes was changed, a light irradiated vacant liquid crystal cell was prepared, and into the space of said liquid crystal cell, an about 32% aqueous solution of lithium 4-trans-pentyl cyclohexanoate was charged at about 45°C, and the peripheral of the liquid crystal cell

was completely sealed with an epoxy resin. Temperature of the liquid crystal cell was lowered to room temperature (25°C) and the cell was observed with the polarized light microscope to confirm orientation controlled state. Fig. 3 shows a photo image with the polarized light microscope, wherein reference numeral 2 represents the white field of view when the horizontal pattern having stripes of FIG. 1 was changed to a diagonal pattern having stripes, and reference numeral 3 represents the black field of view when the horizontal pattern having stripes of FIG. 1 was changed to a diagonal pattern having stripes.